

REMARKS

Support for the above-requested amendments to claim 1 is found throughout the specification, such as, for example, in paragraphs [0021], [0024], [0026], and FIGS. 1a-1d. Support for the amendments to claim 3 is found at least in paragraph [0021]. Claim 5 has been amended to remove the term “acoustic”. Support for the additional amendments to claim 5 is found in at least paragraph [0024] and FIGS. 1a-1d. Claims 6-9 have been amended to further clarify the location of the decorative surface. Support for the amendments to claim 10 is found at least in paragraphs [0030], [0033] and [0035]. Claim 17 has been amended for grammatical reasons. Claim 18 has been amended to further define the “sides” of the main body. Claim 2 has been canceled without prejudice. Claims 20-46 were canceled without prejudice in a previous Amendment. No question of new matter arises and entry of the amendments is respectfully requested.

Claims 1 and 3-19 are before the Examiner for consideration.

Rejection under 35 U.S.C. §112, second paragraph

Claims 1-9 and 18 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner asserts that it is not clear in claim 1 if the body has an edge and, and if so, where the edge is located in relation to the body. Additionally, it is asserted that it is unclear what has a second density, namely, the body or the edge. Further, the Examiner asserts that it is not clear if the first material has a first or a second density. The Examiner has applied a similar rationale to claims 6 and 7.

With respect to claim 3, the Examiner asserts that it is not clear if the edge comprises a substrate of a material or if the edge and the substrate produce a laminated element. Further, the meaning of the term “acoustic substrate” it is not clear to the Examiner. The Examiner asserts that an “acoustic substrate” is a function, not a material. Similar reasoning has been applied to claims 8 and 9.

Regarding claim 18, it is asserted that it is not clear if the body has sides. Additionally, the Examiner asserts that the number of sides is unclear.

In response to this rejection, Applicant has amended claim 1 to more distinctly define the location of the peripheral edge portion in relation to the main body and to clarify that the peripheral edge portion has a second density. Claim 3 has been amended to remove the term “acoustic” and recite that the substrate has a top major surface, a bottom major surface, and

two minor surfaces. Claims 6, 7, 8, and 9 have been amended to further define the location of the decorative surface. Claim 18 has been amended to recite that the reinforcing edge is positioned on the front surface, the back surface, the left edge, and the right edge of the main body. Applicant submits that claims 1-9 and 18, as amended, are sufficiently definite and respectfully requests that the Examiner reconsider and withdraw this rejection.

Rejection Under 35 U.S.C. §102(b)

Claims 1-3 and 5-12 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,925,765 to Fay, *et al.* ("Fay"). The Examiner asserts that Fay teaches a decorative acoustic panel that has a main body formed of a first material inherently having a first density and at least one peripheral edge formed of the first material that has a second density. It is asserted that the second density is inherently greater than the first density, depending upon which element comprises the second material. The Examiner asserts that Fay teaches that the edge is folded or compressed about a fold point and inherently has a decorative surface.

Initially, Applicant submits that claim 2 was canceled without prejudice, thereby rendering the rejection of this claim moot.

In response to the rejection of the remaining claims, Applicant respectfully directs the Examiner's attention to independent claims 1 and 10 and submits that claim 1 defines a decorative acoustic panel and claim 10 defines an acoustic panel that are not taught (or suggested) within Fay. Fay teaches a faced insulation assembly that includes a facing sheet with a central field portion that overlays and is bonded to a major surface of the insulating layer. (*See, e.g.*, column 2, lines 44-47, column 4, lines 15-19, and FIG. 1). The facing sheet has two lateral tabs that are joined to the central field portion of the facing sheet along fold lines. (*See, e.g.*, column 2, lines 48-49). The lateral tabs are folded back to overlay the central field portion of the sheet for packaging, shipping, and handling to prevent damage to the tabs. (*See, e.g.*, column 2, lines 49-51, column 4, lines 23-25, and column 6, lines 39-43). The two lateral tabs are joined to the central field portion of the sheet along fold lines. (*See, e.g.*, column 6, lines 38-39). The fold lines may include laser etched or mechanically formed score lines that are formed in the outer surface of the sheet and coincide with and extend along the lengths of the fold lines to help maintain the lateral tabs in the folded position. (*See, e.g.*, column 2, lines 54-58 and column 6, lines 43-49). Tab strips are bonded to the

lateral tabs by a pressure sensitive adhesive. (*See, e.g.*, column 2, lines 60-62 and column 4, lines 20-23). The tab strips provide the lateral tabs with increased integrity relative to the central field portion for handling and stapling. (*See, e.g.*, column 2, lines 58-61 and column 4, lines 23-25). The lateral tabs may be left in their folded position, they may be unfolded for stapling to framing members with the tab strips left in place, or one or both of the tab strips may be unfolded and the tab strips removed for bonding to framing members. (*See, e.g.*, column 2, lines 62-67, column 4, lines 32-38 and 44-61, and FIGS. 3-5).

Applicant respectfully submits that Fay does not teach a decorative acoustic panel that includes (1) a main body having a decorative top surface and a bottom surface, where the main body is formed of a first material having a first density and (2) at least one peripheral edge portion positioned at a side of the main body and having a decorative surface, where the peripheral edge portion is formed of compressed first material that has a second density greater than the first density, where the peripheral edge portion is folded about a fold point such that the peripheral edge portion is flush against the main body, and where the peripheral edge portion is located between the top surface and the bottom surface of the main body (claim 1) or an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region to form a flange formed of compressed fibers that is rotated against the main body until the flange is flush against the main body, where the rotated flange forms the reinforcing edge (claim 10).

Turning first to claim 1, Applicant notes that in at least one embodiment, Fay teaches that the lateral tabs joined to the central field portion are folded back to overlay the central field portion. (*See, e.g.*, column 6, lines 37-42 and FIGS. 1-3). As shown in FIG. 1, for example, the tabs, when folded about a fold point, extend partially over the top surface of the facing sheet. It is submitted that these lateral tabs only minimally overlap the top of the central field portion, and are not positioned between the top surface and bottom surface of the main body as required by claim 1. Additionally, it is respectfully submitted that the lateral tabs of Fay are not formed of a compressed material. Fay teaches that the fold lines joining the lateral tabs to the central field portion may be laser etched or mechanically scored along the length of the fold lines to help maintain the tabs in their folded position. (*See, e.g.*, column 6, lines 42-48). There is simply no teaching within the four corners of Fay of compressing the tabs to form a peripheral edge portion formed of compressed material as claimed in claim 1.

With respect to claim 10, Applicant submits that Fay does not teach a reinforcing edge formed of a flange made of compressed fibers as required by claim 10. As discussed above, there is no teaching within Fay of compressing the tabs, particularly compressing the tabs or any portion of the central field portion to form a flange of compressed material. In Fay, the tabs are merely folded about a fold point which may be laser etched or mechanically scored to help maintain the folded position of the tabs. (*See, e.g.*, column 6, lines 42-48). Laser etching and mechanical scoring do not result in a compression of fibers or the formation of a flange.

In order for a reference to be anticipatory, each and every element of the claimed invention must be present within the four corners of the cited reference. Because Fay does not teach a peripheral edge portion located between a top surface and a bottom surface of the main body or a peripheral edge portion formed of a compressed first material (claim 1) or a reinforcing edge formed of a flange made of compressed fibers (claim 10), Applicant respectfully submits that Fay is not an anticipatory reference. Accordingly, Applicant submits that independent claims 1 and 10 are not anticipated by Fay. With respect to dependent claims 3, 5-9, and 11-12, Applicant submits that because independent claim 1 is not taught (or suggested) within Fay and claims 3 and 5-9 are dependent upon independent claim 1 and contain the same elements as claim 1, dependent claims 3 and 5-9 are also not taught (or suggested) by Fay. Similarly, with respect to dependent claims 11-12, Applicant submits that because independent claim 10 is not taught (or suggested) within Fay and claims 11-12 are dependent upon independent claim 10 and contain the same elements as claim 10, dependent claims 11-12 are also not taught (or suggested) by Fay.

In view of the above, Applicant submits that claims 1, 3, and 5-12 are not anticipated by, or obvious over, Fay and respectfully requests that this rejection be reconsidered and withdrawn.

Rejection Under 35 U.S.C. §103(a)

Claims 13 and 15-19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,925,765 to Fay, *et al.* ("Fay") in view of U.S. Patent No. 3,835,604 to Hoffmann, Jr. ("Hoffmann").¹ The Examiner admits that Fay fails to teach a

¹ Applicant respectfully submits that the rejection was intended to include U.S. Patent No. 4,946,738 to Chenoweth, *et al.* ("Chenoweth") due to its inclusion in the Examiner's rejection of claim 19.

decorative design as claimed in claim 13. In this regard, Hoffmann is cited for assertedly teaching a folded facing and insulation panel where the facing sheet has a decorative pattern such as indicia so that the installed appearance of the insulation is attractive. The Examiner concludes that it would have been obvious to one of skill in the art to have modified the panel of Fay to include the decoration as claimed in order to achieve an attractive or aesthetic appearance as taught by Hoffmann. The Examiner also concludes that it would have been obvious to extend the decoration throughout the entire body to make the entire panel attractive.

With respect to claim 19, the Examiner admits that neither Fay nor Hoffmann explicitly recite a non-linear shape. In this regard, Chenoweth is cited for assertedly teaching polyester fibers for nonwovens that are shaped as desired. Further, the Examiner asserts that it would have been obvious to one of skill in the art to form an edge having a non-linear shape depending upon what the panel is going to insulate. The Examiner asserts that the size and thickness recitations are all deemed matters of choice involving differences in degree and/or size and are not patentable distinctions.

In response to this rejection, Applicant submits that because independent claim 10 is not taught or suggested within Fay (as discussed *supra*), and neither Hoffmann nor Chenoweth add to the deficiencies of Fay (*i.e.*, a reinforcing edge formed of a flange made of compressed fibers) and because claims 13 and 15-19 are dependent upon independent claim 10 and contain the same elements as claim 10, dependent claims 13 and 15-19 are also not taught or suggested by Fay, Hoffmann, and/or Chenoweth.

Notwithstanding the above, Applicant respectfully directs the Examiner's attention to independent claim 10 and submits that claim 10 defines an acoustic panel that is not taught or suggested within Fay, Hoffmann, and/or Chenoweth. With respect to Fay, Applicant submits that the faced insulation assembly taught by Fay is discussed in detail above, and for purposes of brevity, will not be discussed in detail with respect to this rejection. Hoffmann teaches building insulation that includes a strip of a fibrous insulation blanket and a facing sheet. (*See, e.g.*, column 2, lines 50-54 and the Abstract). The facing sheet is applied to one side of the insulation blanket by an adhesive. (*See, e.g.*, column 2, lines 54-57). In addition, the facing sheet has lip portions that project beyond the side edges of the blanket strip to mount the insulation on spaced studs or other supports. (*See, e.g.*, column 3, lines 11-17, the Abstract, and FIGS. 1 and 6). A decorative surface extends across the central portion of the

facing sheet and across a portion of one of the projecting lips. (*See, e.g.*, column 3, lines 34-41 and the Abstract).

Chenoweth teaches a non-woven fibrous blanket formed of a plurality of glass fibers, homogenous synthetic fibers, and bicomponent synthetic fibers that have been homogeneously blended to form a generally interlinked matrix. (*See, e.g.*, column 4, lines 32-41 and FIG. 1). The loft and density of the fibrous blanket may be adjusted by the selection of the diameter and/or length of the homogenous synthetic fibers. (*See, e.g.*, column 5, lines 1-3). A thermosetting resin is dispersed uniformly throughout the matrix and acts as a heat activated adhesive to bond the fibers at their points of contact and achieve a desired degree of rigidity and integrity. (*See, e.g.*, column 6, lines 1-13). The bonded fibers are then processed conform the final product into a final, desired shape. (*See, e.g.*, column 6, lines 55-58).

Applicant respectfully submits that none of Fay, Hoffmann, or Chenoweth teach or suggest an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region to form a flange formed of compressed fibers that is rotated against the main body until the flange is flush against the main body. As discussed above, Fay is silent with respect to teaching or suggesting a flange formed of compressed fibers. Hoffmann specifically teaches folding outer edge portions (*i.e.*, lip areas) of the sheet down and under the adjacent portion of the sheet along fold lines. (*See, e.g.*, column 3, lines 11-17 and column 4, lines 30-36). However, Hoffmann does not teach or suggest any compression of these edge portions or “lip areas”. Indeed, both Hoffmann and Chenoweth are silent with respect to any teaching or suggestion of the compression of fibers, especially of compressing fibers to form a flange.

In addition, Applicant submits that there is no motivation for one of skill in the art to arrive at the presently claimed invention based on the teachings of Fay, Hoffmann, and Chenoweth. To establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references’ teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). In particular, Applicant submits that one of ordinary skill in the art would not be motivated to arrive at the acoustic panel claimed in claim 10 that includes (1) a main body

having a front surface, an opposing back surface, a left edge, and a right edge and (2) a reinforcing edge on at least one side of the main body formed by compressing an adjacent outer region to form a flange formed of compressed fibers that is rotated against the main body until the flange is flush against the main body. As discussed above, Fay, Hoffmann, and Chenoweth do not teach or suggest a flange formed of compressed fibers that is flush against the main body. In fact, Fay, Hoffmann, and Chenoweth are silent with respect to any compression of fibers, particularly the compression of fibers to form a flange of compressed fibers as required by claim 10. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. Additionally, Applicant submits that, in view of the above, the combination of the teachings of Fay, Hoffmann, and Chenoweth would not result in the acoustic panel claimed in claim 10.

In view of the above, Applicant respectfully submits that amended claim 10 is patentably distinguishable over Fay, Hoffmann, and Chenoweth, either alone or in any combination. Because claims 13 and 15-19 are dependent upon independent claim 10, which, as discussed above, is not taught within any of Fay, Hoffmann, or Chenoweth and because claims 13 and 15-19 contain the same elements as claim 10, claims 13 and 15-19 are also submitted to be non-obvious and patentable. Accordingly, Applicant respectfully submits that claims 13 and 15-19 are not obvious over Fay in view of Hoffmann and Chenoweth and respectfully requests reconsideration and withdrawal of this rejection.

Rejection Under 35 U.S.C. §103(a)

Claims 4 and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,925,765 to Fay, *et al.* ("Fay") in view of U.S. Patent No. 3,835,604 to Hoffmann, Jr. ("Hoffmann") and further in view of U.S. Patent No. 4,946,738 to Chenoweth, *et al.* ("Chenoweth"). The Examiner admits that neither Fay nor Hoffmann teach using bicomponent fibers. In this regard, Chenoweth is cited for assertedly teaching a nonwoven material that includes a matrix of glass fibers, solid or hollow homogenous synthetic fibers, and bicomponent synthetic fibers that have been intimately combined with a thermosetting resin into a homogenous mixture. It is asserted that the mixture is dispersed to form a blanket and melted to be formed into complexly curved and shaped configurations. The Examiner concludes that it would have been obvious to one of skill in the art to have modified the panel

of Fay to include bicomponent polyester fibers for the purpose of forming curved and shaped configurations.

In response to this rejection, Applicant submits that because independent claims 1 and 10 are not taught or suggested within Fay (as discussed *supra*), and Hoffmann and Chenoweth add nothing to the deficiencies of Fay (*i.e.*, a peripheral edge portion that is located between the top surface and the bottom surface of a main body or a peripheral edge portion that is formed of a compressed material (claim 1) or a peripheral edge formed of a flange made of compressed fibers (claim 10), and because claims 4 and 14 are dependent upon independent claims 1 and 10, respectively, and contain the same elements as the claim from which they depend, dependent claims 4 and 14 are also not taught or suggested by Fay, Hoffmann, and/or Chenoweth.

Notwithstanding the above, Applicant respectfully directs the Examiner's attention to independent claims 1 and 10 and submits that claim 1 defines a decorative acoustic panel and claim 10 defines an acoustic panel that are not taught within Fay, Hoffmann, and/or Chenoweth. Fay, Hoffmann, and Chenoweth were discussed in detail above, and for purposes of brevity, they will not be discussed in detail with respect to this rejection.

Applicant respectfully submits that none of Fay, Hoffmann, and Chenoweth teach or suggest (1) a main body having a decorative top surface and a bottom surface, where the main body is formed of a first material having a first density and (2) at least one peripheral edge portion positioned at a side of the main body and having a decorative surface, where the peripheral edge portion is formed of compressed first material that has a second density that is greater than the first density, where the peripheral edge portion is folded about a fold point such that the peripheral edge portion is flush against the main body, and where the peripheral edge portion is located between the top surface and the bottom surface of the main body (claim 1) or an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region to form a flange formed of compressed fibers that is rotated against the main body until the flange is flush against the main body (claim 10).

Turning first to claim 1, Applicant respectfully submits that Fay does not teach or suggest a peripheral edge portion that is positioned between a top surface and a bottom surface of a main body or a peripheral edge portion that is formed of a compressed material. Fay teaches lateral tabs joined to a central field portion which are folded back to overlay the

central field portion. (*See, e.g.*, column 6, lines 37-42 and FIGS. 1-3). It is submitted that these lateral tabs only minimally overlap the top portion of the central field portion, and are not located between the top surface and the bottom surface of the main body as required by claim 1. As shown in FIG. 1 of Fay, the tabs, when folded about a fold point, extend partially over the top surface of the facing sheet.

Additionally, it is respectfully submitted that the lateral tabs of Fay are not formed of a compressed material. Fay specifically teaches that the fold lines joining the lateral tabs to the central field portion may be laser etched or mechanically scored along the length of the fold lines to help maintain the tabs in their folded position. (*See, e.g.*, column 6, lines 42-48). There is simply no teaching or suggestion within the four corners of Fay of compressing the tabs (or any portion of the central field portion) to form a peripheral edge portion formed of a compressed material as claimed in claim 1. Hoffmann teaches folding outer edge portions (*i.e.*, lip areas) of the facing sheet down and under the adjacent portion of the sheet along fold lines (*see, e.g.*, column 3, lines 11-17 and column 4, lines 30-36), but does not teach or suggest compressing these edge portions or “lip areas”. Chenoweth is silent with respect to any teaching or suggestion of the formation of a compressed region, and thus cannot make up for the deficiencies of Fay or Hoffmann. Accordingly, it is respectfully submitted that claim 1 is non-obvious and patentable.

With respect to claim 10, it is respectfully submitted that Fay, Hoffmann, and Chenoweth do not teach or suggest a flange formed of compressed fibers where the flange is flush against the main body. Indeed, Fay, Hoffmann, and Chenoweth are silent with respect to teaching or suggesting any compression of fibers, particularly compressing fibers to form a flange of compressed fibers as is required by claim 10. Therefore, it is respectfully submitted that Fay, Hoffmann, and Chenoweth do not teach or suggest the acoustic panel claimed in amended claim 10.

In addition, Applicant submits that there is no motivation for one of skill in the art to arrive at the presently claimed inventions based on the teachings of Fay, Hoffmann, and Chenoweth. As discussed above, to establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references’ teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev.

3, August 2005, §2142). In particular, Applicant submits that one of ordinary skill in the art would not be motivated to arrive at the invention claimed in claim 1, namely, a decorative acoustic panel that includes (1) a main body having a decorative top surface and a bottom surface, where the main body is formed of a first material having a first density and (2) at least one peripheral edge portion positioned at a side of the main body and having a decorative surface, where the peripheral edge portion is formed of compressed first material that has a second density greater than the first density, where the peripheral edge portion is folded about a fold point such that the peripheral edge portion is flush against the main body, and where the peripheral edge portion is located between the top surface and the bottom surface of the main body (claim 1) or an acoustic panel that includes a main body and a reinforcing edge on at least one side of the main body that is formed by compressing an adjacent outer region to form a flange formed of compressed fibers that is rotated against the main body until the flange is flush against the main body (claim 10).

As discussed above, none of Fay, Hoffmann, or Chenoweth teach or suggest the formation of a compressed region, such as the peripheral edge portion formed of compressed first material in claim 1 or the flange formed of compressed fibers of claim 10. In fact, Fay, Hoffmann, and Chenoweth are completely silent with respect to any teaching or suggestion of the formation of compressed regions. In addition, none of the cited references teach or suggest a peripheral edge portion that is located between a top surface and a bottom surface of a main body as required by claim 1. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness. Further, Applicant submits that, in view of the above, the combination of the teachings of Fay, Hoffmann, and Chenoweth would not result in the inventions claimed in amended claims 1 and 10.

In view of the above, Applicant respectfully submits that amended claims 1 and 10 are patentably distinguishable over Fay, Hoffmann, and Chenoweth, either alone or in any combination. Because claims 4 and 14 are dependent upon independent claim 1 and claim 10 respectively, which are not taught or suggested with Fay, Hoffmann, or Chenoweth, and because claims 4 and 14 contain the same elements as the claim from which they depend, claims 4 and 14 are also submitted to be non-obvious and patentable. Accordingly, Applicant respectfully submits that claims 4 and 14 are not obvious over Fay in view of Hoffmann and Chenoweth and respectfully requests that this rejection be reconsidered and withdrawn.

Conclusion

In light of the above, Applicant believes that this application is now in condition for allowance and therefore requests favorable consideration.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

Date: _____

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